The Insights of Value-Added Accounts by Farm Size

Roger Strickland and Cheryl Steele

Value added is a production-based measure—that is, the creation of new income through production. The account component, "final agricultural sector output," is the total of all production from resources controlled by farming operations. The value-added accounts were first used by ERS 6 years ago and were adopted as the standard presentation in 1997. The presence of net farm income as the "bottom-line" in the value-added accounting provides a common reference point, and every line item in the value-added table can be related directly to one or more line items in the traditional farm income accounts. (Those with access to the Internet can view an explanation as to how to accomplish a crosswalk between the value-added format and the traditional farm income format at http://www.econ.ag.gov/briefing/fbe/fi/finfidva.htm)

The value-added accounts for measuring farm income are now available by size class. These accounts provide additional perspective and insight into the often differing priorities, management strategies, and operational characteristics of the various participants in the U.S. farm sector. This information supplements the aggregate measures in the national sector accounts and enables a more thorough analytical evaluation of the economics of the U.S. agricultural sector.

The annual size class accounts are maintained and presented in tables 5-1 through 5-4, which contain the accounts for 1996. Table 5-1, with the value-added account, and table 5-3, with the additional details regarding commodities produced, are both expressed in monetary units, which is helpful in gaining perspective. Tables 5-2 and 5-4 are identical to tables 5-1 and 5-3, respectively, except that the information is represented as relationships (shares) and expressed in percentage terms. Knowledge of the relationships supplements the information base formed by the monetary amounts and is often more revealing in terms of priorities of the participants and their operational attributes.

For a simple illustration, the smallest size class (less than \$20,000 of production), representing 63 percent of farms, generated only 6 percent of the farm sector's final output. In contrast, the largest size class (with

production valued at \$1 million or more) represented 1.1 percent of farms and accounted for 26 percent of final output (table 5-2). The following illustrates the flexibility of these accounts as a tool in analysis: When combined, the three largest size classes for farms, with production in excess of \$250,000, comprised 8 percent of farm operations and accounted for 61 percent of production. This line of analysis could be pursued from the perspective that the U.S. farm sector has two distinct groups of farms—the less than 10 percent of farms that create a majority of production and a majority of farms that create less than 10 percent of production.

Production of total crops and total livestock are distributed somewhat comparably across the various size groups, with the largest farms producing the biggest share of each. Livestock production is a little more concentrated on the larger farms, reflecting economies of size available in production of eggs, hogs, milk, and beef. The "services and forestry" account presents a contrast, which can be traced primarily to the influence of "gross imputed rental value of dwellings." There is a correlation between the number of farms and the number of farm dwellings. Consequently, gross imputed rental value of dwellings comprises almost half of the "services and forestry" account across all sales classes.

	Farms with production of—						
	\$1 million	\$20,000 to	Less than				
	or more	\$999,999	\$20,000				
		Percent					
Number of farms	1.1	36.1	62.8				
Crop output	24.0	73.4	2.5				
Livestock output	32.3	63.5	4.3				
Services and forestry	11.5	59.7	28.7				
Total of all output	26.2	66.5	5.6				

Some Characteristics of the Smallest Farms

Farms of all sizes show a definite tendency to specialize in certain types of production (table 5-4). The smallest farms are notable for their disproportionate share of production of cattle and calves, tobacco, and miscellaneous livestock, with the latter being the non-

traditional animals. On the other hand, the very largest operations demonstrate a preference for specialty crops (nursery, fruits, vegetables), hogs, cotton, and poultry and eggs, with egg production being particularly concentrated in this size group.

Tobacco is concentrated on small farms because of production controls that were initiated decades ago and are thus locked into historic production patterns existing at the inception of the Government's allotment/quota programs, when farms were predominantly much smaller. The earnings from tobacco became capitalized into the allotments/quotas, and the additional capital costs have served to inhibit consolidation of ownership into larger operations, as large growers prefer to acquire marketing quotas via renting from owners rather than expending capital for purchases.

Production classified as miscellaneous livestock is often small or exotic animals that require more monitoring and hands-on management. Examples would be fish, mink, ostrich, and crayfish. Production of these animals might appeal to that segment of small farms having available relatively more operator and family labor than the small, cattle-producing operations addressed immediately below.

The type and organization of cattle production common to the smaller operations tend to be the low-maintenance cow-calf operations where the feed consists mostly of pasture supplemented by hay. A typical operation might be one in which, during the summer, the cow with calf feeds on pasture land, which is likely to be moist bottom land not conducive to row-cropping but productive for forage crops. Then, during the fall and winter, the growing herd grazes cropland planted to cover crops or small grains. Some calves may be slaughtered for home consumption in the winter and the others sold as yearling or feeders in the early spring to make way for the new calf crop.

A key structural attribute associated with this type of operation that makes it attractive to small operators is that no person needs to be present to assist the cattle in grazing. Even when the animals' diet must be supplemented with hay, a person can distribute the hay once a day. This type of operation leaves the operator and family members free to engage in off-farm employment. Another attribute that may be an important criterion in enterprise selection for those who are engaged in off-farm employment (and not dependent on farm-

ing for their livelihood) is the aesthetic appeal of a cow-calf operation (cute calves, the serenity of pastures, scenic fences, etc.)

Production of Fungible Commodities

Table 5-4 shows that a disproportionately large percentage of storable, fungible crops, such as food grains, feed crops, and oil crops, are produced on the intermediate-sized farms with sales ranging from \$20,000 to \$1 million. Fungible means that one unit is essentially the same as another unit, regardless of who produces it or where production occurs. The storable attribute is significant because it further limits the opportunities to add value through post-harvest services, such as sorting, grading, special storage, and transportation requirements. Such products are thus more likely to be sold through a local wholesaler (grain elevator), where the commodity is added to the top of the storage bin and sold out of the bottom in a firstin/first-out system for handling indistinguishable (fungible) quantities.

Given that operations with sales ranging from \$100,000 to \$250,000 produce the largest share of these food, feed, and oil crops (table 5-4), the implication may well be that this size of farm is large enough to realize most of the economies of scale in production. At this level of production, farms can fully employ their equipment using state-of-the art technologies, but the nature of the commodities being produced offer little opportunity to add value by assuming the functions of the next "middleman" in the assembly, preparation, or other steps in product marketing.

	Farms v	with production	on of—
	\$1 million	\$20,000 to	Less than
	or more	\$999,999	\$20,000
		Percent	
Livestock and products	32.3	63.5	4.3
Food grains	12.2	86.5	1.2
Feed crops	9.4	86.9	3.7
Cotton	33.5	65.8	.7
Tobacco	8.8	77.6	13.7
Oil crops	9.1	88.9	1.9
Vegetables	32.7	66.1	1.1
Fruit and nuts	37.6	57.7	4.7
Greenhouse and nursery	65.5	32.7	1.9

Profitability Much Lower on the Smallest Farms

Those establishments classified as farming operations with sales of less than \$20,000 appear to be quite inef-

ficient when viewed though a financial accounting lens. In fact, they are so much more inefficient in production activities than the larger operations that they earn an increasingly smaller share of the income from production as each layer of expenses is peeled away. Producing 6.1 percent of total output, these smallest operations generated only 1.8 percent of the gross value added, indicating that they expended proportionately more on intermediate consumption outlays, which are out-of-pocket (variable) expense items. From a financial accounting perspective, the earnings picture for these smallest farms appears only to worsen with a more complete accounting of expenses, indicating negative net value added and net farm income. The implications are that the smallest farms are relatively inefficient producers and that the operators are not economically rational, if the assumption is that their primary objective is to earn a before-income-tax profit.

If, on the other hand, the operators were seeking to achieve one or more other objectives, they may have been much more successful than is apparent from the typical economic accounting perspective. More likely, the operators of these small farms operate on the assumption that they are unlikely to earn a substantial profit on their farming activities in most years and that the cumulative earnings over several years will be a substantial loss. Then, their objective becomes to maximize their combined income from all sources, in which case, they will in effect seek to minimize their after-income-tax losses on the farming activities. Thus, in their management strategy, the tax refund becomes part of the revenue stream to the farming activities and affects decisions made regarding the operating characteristics and structure of the production activities.

To realistically model this management strategy, one would have to account for the tax savings accruing to the operators' nonfarm earnings and recognize that this alternative after-income-tax measure of earnings would result in a more positive assessment of the finances of the farming enterprises. In addition, the objectives may extend into other noneconomic factors, such as the aesthetic appeal of rural life.

This is not a sectorwide issue. A sharply contrasting picture emerges for those farms larger than \$20,000, as is clearly evidenced in the following distributions summarized from table 5-2. These larger operations increase their share of production income at each level of measurement as one moves down the value-added accounting model. From these aggregate statistics, it is

not immediately obvious that those farms exceeding \$1 million in sales gain much in efficiency over those in the in-between group. As will be seen later, these are not homogeneous groups, as there is an obvious tendency for the larger groups to specialize in different commodities. This tendency implies that there are gains in profit potential with growth in size in some types of production, even though the benefits may derive from expanding into new functions rather than savings in production costs.

	Farms v	Farms with production of—					
	\$1 million	\$20,000 to	Less than				
	or more	\$999,999	\$20,000				
		Percent					
Number of farms	1.1	36.1	62.8				
Total of all output	25.6	68.2	6.1				
Gross value added	27.8	70.4	1.8				
Net value added	31.7	72.2	-3.9				
Net farm income	36.9	75.4	-12.3				

A particularly noteworthy tendency evident in figure 5-1 is that the smallest farms incur a share of propertyrelated expenses that is greatly disproportionate to their share of the farm sector's output (fig. 5-2). It is also in contrast to the situation with the out-of-pocket (variable) costs, where the share incurred by the smallest farms is much more proportionate to their share of the production (fig. 5-2). There is the clear implication that the smallest farms own considerable property, which raises an accounting issue that may be addressed through either of two questions: (1) Is there an overcounting of the portion of these expenses related directly to the farming activity? or (2) Does the traditional financial accounting model omit some benefits, including, perhaps, some noneconomic benefits? A related question is source of funds for the capital expenditures because, if the accounting of expenses and benefits is appropriate, the capital stock is being consumed and would have to be funded from another source.

Factor Payments

Expenditures for the factors of production (hired labor, rented land, and borrowed capital) reflect significant structural differences in the three size groups of farming operations summarized below. The operator and family members furnish most of the labor required on the small operations, and as a group, small operations paid only 3.2 percent of the sector's total hired labor costs. It logically follows that the largest operations would have to incur a large share (45 percent) of the sector's labor costs, as not only is the labor input from

the operator and family limited, but management activities may be a more profitable use of their time. Likewise, the smaller operations pay an even smaller share of the net rental payments for land to nonoperator landlords because the smaller operations tend to own their land and often look to alternative sources of income rather than expansion of farming activities through renting land from others.

The story here is the overwhelming proportion of the rent paid to nonoperator landlords (83 percent) and interest payments (72 percent) paid by the farmers falling into the in-between group with sales ranging from \$20,000 to \$1 million. Again, these are the ones producing the fungible field crops and the livestock. The field crops and the cow-calf operations are land intensive, causing this group to incur the bulk of the land rental expenses. Why these producers pay such a large share of the interest expenses is not quite so clear, but operations in this size group are still mostly owner-operated, whether there is one owner or several family members. Their primary sources of capital for operating expenses and expansion are debt capital and inheritance, with the latter often resulting in additional debt to pay inheritance taxes. Many of the farm operations with sales over \$1 million are corporate farms and often subsidiaries of larger corporations, in which case the capital may be provided internally. Inheritance taxes have no effect because the taxes are the obligation of the stockholder and not the corporation.

	Farms v	with production	on of—
	\$1 million or more	\$20,000 to \$999,999	Less than \$20,000
		Percent	
Number of farms	1.1	36.1	62.8
Factor payments:			
Employee compensation	44.7	52.1	3.2
Net rent received by nonoperator landlord	ls 14.1	83.2	2.7
Real estate and nonrea estate interest	ıl 14.9	71.2	13.9

Negative Numbers Tell a Story

Four negative numbers appear in the size class accounts presented in table 5-1, and each is quite logical when put in perspective. Net government transactions are negative for both the \$1-million-and-over group and \$20,000-and-less group, but the causes are different. (The negative indicates that they are paying

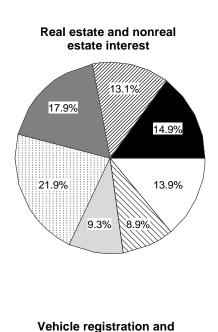
more in taxes and fees to government entities than they receive in direct payments under government programs.) Congress imposes payment limitations on the amounts that individual farming operations may receive under Federal programs. Many of the largest operations produce livestock or fruit and vegetable crops not covered under Federal programs. The negative in net government transactions for the smaller group reflects the relatively high property taxes paid by small producers due to the disproportionate value of total assets comprised by both farm dwellings and motor vehicles. The impact is also seen in the size of the share of capital consumption and interest on real estate incurred by the smallest operations, as they generally have considerably more than would appear to be justified if the sole objective were to maximize profitability of the farm operation.

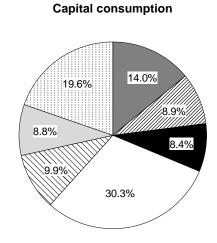
Both net value added and net farm income are negative for the \$20,000-and-less group of farms, which again reflects the rural-living aspects of these small operations, where supplemental income from off-farm sources generally is greater than the income from farming activities. Typically the value of buildings, particularly dwellings, and motor vehicles far exceeds what would appear to be justifiable for the farming activities. The implication is that the operators may be consuming elements of the rural lifestyle that are not subject to market transactions and which are not included in the agricultural sector accounts.

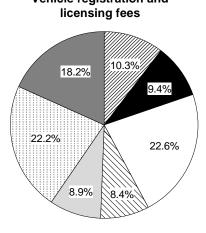
	Farms with production of—				
	\$1 million	Less than			
	or more	\$20,000			
	Percent				
Net government					
transactions	-58,279	-711,592			
Net value added	30,061,943	-3,717,570			
Net farm income	19,274,743	-6,430,648			

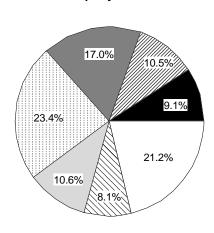
In conclusion, the disaggregation of the national value added accounts into size class accounts represents a significant addition to the value of the agricultural sector accounts by enabling analysts to peer inside the sector to ascertain the attributes and differences among groups of farm operations. These details provide significant new information about the U.S. farming sector and greatly expand the range and types of issues that analysts may address. The insights touched upon in this chapter illustrate the many substantive questions that may be addressed through these accounts.

Figure 5-1 **Distribution of property-related expenses, 1996** *Small farms incurred large property-related expenses*







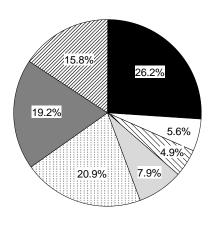


Property taxes

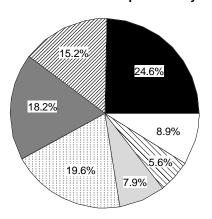


Variable costs for small farms were in line with their share of output

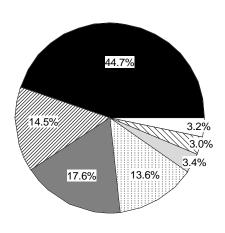
Final agricultural sector output



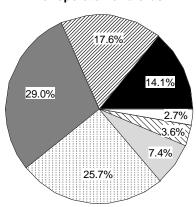
Intermediate consumption outlays



Employee compensation



Net rent paid to nonoperator landlords



Farms by sales class



Table 5-1—Number of farms, net value added, and net farm income by value of size class, 1996

Item	\$1,000,000 or more	\$500,000- \$999,999	\$250,000- \$499,999	\$100,000- \$249,999	\$50,000- \$99,999	\$20,000- \$49,999	Less than \$20,000	Total U.S.	
	Number								
Number of farms ¹	21,904	42,843	98,090	214,739	159,743	229,738	1,296,853	2,063,910	
				Thousa	and dollars				
+ Final crop output	27,273,592	19,369,733	24,516,379	26,121,443	8,549,744	4,810,650	2,870,725	113,512,267	
+ Final animal output	29,658,147	14,172,456	15,802,964	17,313,001	6,568,935	4,533,788	3,913,956	91,963,245	
+ Services and forestry	2,394,240	2,135,448	3,187,828	3,763,059	1,643,993	1,656,642	5,955,326	20,736,536	
= Final agricultural sector output	59,325,979	35,677,637	43,507,171	47,197,503	16,762,671	11,001,080	12,740,007	226,212,048	
less: Intermediate consumption outlays	27,610,013	17,073,794	20,509,078	21,990,799	8,923,260	6,279,197	10,001,037	112,387,179	
Farm origin Manufactured inputs Other intermediate expenses	13,631,209 5,085,081 8,893,723	7,411,348 4,535,242 5,127,204	7,835,285 6,013,563 6,660,231	6,645,307 6,821,741 8,523,751	2,796,237 2,335,354 3,791,669	1,695,431 1,686,133 2,897,633	2,479,864 1,916,147 5,605,026	42,494,681 28,393,261 41,499,237	
plus: Net government transactions + Direct government payments - Motor vehicle registration	-58,279 606,521	164,042 927,085	296,677 1,534,554	183,155 1,875,444	40,789 804,178	114,735 701,743	-711,592 836,016	29,527 7,285,541	
and licensing fees - Property taxes	40,402 624,398	44,081 718,962	77,978 1,159,899	94,869 1,597,421	38,008 725,380	36,077 550,931	96,847 1,450,761	428,262 6,827,752	
= Gross value added	31,657,687	18,767,885	23,294,770	25,389,858	7,880,201	4,836,618	2,027,377	113,854,396	
less: Capital consumption	1,595,744	1,688,435	2,644,747	3,717,854	1,663,913	1,873,901	5,744,947	18,929,541	
= Net value added	30,061,943	17,079,450	20,650,023	21,672,004	6,216,288	2,962,717	-3,717,570	94,924,855	
less: Factor payments	10,787,200	6,457,452	9,188,573	8,635,256	2,797,065	2,151,867	2,713,079	42,730,493	
Employee compensation Net rent received by	6,805,499	2,209,044	2,677,029	2,070,855	514,556	455,354	486,705	15,219,042	
nonoperator landlords Real estate and nonreal	2,008,470	2,512,446	4,142,291	3,667,473	1,059,549	514,267	388,630	14,293,127	
estate interest	1,973,231	1,735,962	2,369,252	2,896,928	1,222,959	1,182,247	1,837,744	13,218,324	
= Net farm income	19,274,743	10,621,998	11,461,450	13,036,748	3,419,223	810,849	-6,430,648	52,194,362	

¹Farm Numbers and Land in Farms, National Agricultural Statistics Service, U.S. Department of Agriculture, Feb. 1998. Source: Economic Research Service, U.S. Department of Agriculture.

Table 5-2—Percentage distribution for number of farms, net value added, and net farm income by value of size class, 1996

Item	\$1,000,000 or more	\$500,000- \$999,999	\$250,000- \$499,999	\$100,000- \$249,999	\$50,000- \$99,999	\$20,000- \$49,999	Less than \$20,000	Total U.S.
				P	ercent			
Number of farms	1.1	2.1	4.8	10.4	7.7	11.1	62.8	100.0
Final crop output	24.0	17.1	21.6	23.0	7.5	4.2	2.5	100.0
Final animal output	32.3	15.4	17.2	18.8	7.1	4.9	4.3	100.0
Services and forestry	11.5	10.3	15.4	18.1	7.9	8.0	28.7	100.0
Final agricultural sector output	26.2	15.8	19.2	20.9	7.4	4.9	5.6	100.0
less: Intermediate consumption outlays	24.6	15.2	18.2	19.6	7.9	5.6	8.9	100.0
Farm origin Manufactured inputs Other intermediate expenses	32.1 17.9 21.4	17.4 16.0 12.4	18.4 21.2 16.0	15.6 24.0 20.5	6.6 8.2 9.1	4.0 5.9 7.0	5.8 6.7 13.5	100.0 100.0 100.0
plus: Net government transactions + Direct government payments - Motor vehicle registration and licensing fees - Property taxes	8.3 9.4 9.1	12.7 10.3 10.5	21.1 18.2 17.0	25.7 22.2 23.4	11.0 8.9 10.6	9.6 8.4 8.1	11.5 22.6 21.2	100.0 100.0 100.0
= Gross value added	27.8	16.5	20.5	22.3	6.9	4.2	1.8	100.0
less: Capital consumption	8.4	8.9	14.0	19.6	8.8	9.9	30.3	100.0
= Net value added	31.7	18.0	21.8	22.8	6.5	3.1	-3.9	100.0
less: Factor payments	25.2	15.1	21.5	20.2	6.5	5.0	6.3	100.0
Employee compensation Net rent received by	44.7	14.5	17.6	13.6	3.4	3.0	3.2	100.0
nonoperator landlords Real estate and nonreal	14.1	17.6	29.0	25.7	7.4	3.6	2.7	100.0
estate interest	14.9	13.1	17.9	21.9	9.3	8.9	13.9	100.0
= Net farm income	36.9	20.4	22.0	25.0	6.6	1.6	-12.3	100.0

Source: Economic Research Service, U.S. Department of Agriculture.

Table 5-3—Number of farms and cash receipts by value of size class, 1996

			,		,			
Item	\$1,000,000 or more	\$500,000- \$999,999	\$250,000- \$499,999	\$100,000- \$249,999	\$50,000- \$99,999	\$20,000- \$49,999	Less than \$20,000	Total U.S.
				Nι	ımber			
Number of farms ¹	21,904	42,843	98,090	214,739	159,743	229,738	1,296,853	2,063,910
				Thousa	and dollars			
All commodities	57,137,945	34,036,384	39,791,590	40,153,375	13,991,604	8,696,395	7,329,872	202,338,990
Livestock and products	30,071,951	14,405,442	15,844,089	16,405,281	6,226,759	4,325,906	4,432,960	92,914,212
Meat animals .	13,581,488	5,972,109	7,192,184	7,040,839	3,206,635	3,568,797	3,820,445	44,382,498
Cattle and calves	8,393,572	3,652,804	4,818,613	5,190,712	2,643,931	3,013,851	3,424,562	31,138,046
Hogs	5,234,127	2,344,275	2,329,988	1,648,237	452,772	419,646	214,691	12,643,736
Dairy products	7,083,312	2,799,211	4,137,051	7,070,753	1,351,540	362,374	29,684	22,833,925
Poultry and eggs	8,630,898	5,438,238	4,119,647	1,763,554	1,172,130	NA	NA	22,326,291
Broilers	3,643,099	5,701,468	3,217,018	1,130,420	200,664	NA	NA	13,906,019
Miscellaneous livestock	776,254	195,884	395,207	530,134	496,453	394,735	582,831	3,371,498
Crops	27,065,994	19,630,942	23,947,501	23,748,095	7,764,845	4,370,489	2,896,911	109,424,778
Food grains	1,414,292	1,753,053	3,274,298	3,600,122	904,708	459,573	143,912	11,549,958
Wheat	981,823	1,260,779	2,685,926	3,513,835	921,990	443,124	148,140	9,955,616
Feed crops	2,640,153	5,022,786	7,182,477	7,888,973	2,766,103	1,576,895	1,036,269	28,113,655
Corn	2,029,838	3,887,951	5,971,075	6,482,796	1,947,643	967,350	286,710	21,573,363
Cotton	2,500,193	1,671,744	1,671,446	1,266,846	219,348	81,248	49,987	7,460,813
Tobacco	245,488	334,400	667,682	606,674	266,542	293,551	381,653	2,795,990
Oil crops	1,621,113	2,745,949	5,009,292	5,404,538	1,446,750	1,185,206	343,044	17,755,891
Soybeans	1,435,194	2,516,656	4,514,061	4,903,945	1,366,134	1,149,063	326,335	16,211,387
Vegetables	4,694,053	4,248,811	2,871,186	2,251,320	83,079	39,459	160,850	14,348,758
Fruits and nuts	4,407,090	1,411,749	1,764,804	1,470,201	1,667,345	447,819	544,810	11,713,819
All other crops	9,543,612	2,442,451	1,506,316	1,259,420	410,970	286,738	236,386	15,685,894
Nursery	7,127,321	1,105,145	902,755	940,751	356,116	250,620	204,350	10,887,058

NA = Not available.

¹Farm Numbers and Land in Farms, National Agricultural Statistics Service, U.S. Department of Agriculture, Feb. 1998. Source: Economic Research Service, U.S. Department of Agriculture.

Table 5-4—Percentage distribution for number of farms and cash receipts by value of size class, 1996

ltem	\$1,000,000 or more	\$500,000- \$999,999	\$250,000- \$499,999	\$100,000- \$249,999	\$50,000- \$99,999	\$20,000- \$49,999	Less than \$20,000	Total U.S.
				Pe	rcent			
Number of farms	1.1	2.1	4.8	10.4	7.7	11.1	62.8	100.0
All commodities	27.4	16.3	19.7	21.3	7.4	4.5	3.4	100.0
Livestock and products	32.3	15.4	17.2	18.8	7.1	4.9	4.3	100.0
Meat animals .	30.6	13.5	16.2	15.9	7.2	8.0	8.6	100.0
Cattle and calves	27.0	11.7	15.5	16.7	8.5	9.7	11.0	100.0
Hogs	41.4	18.5	18.4	13.0	3.6	3.3	1.7*	100.0
Dairy products	31.0	12.3	18.1	31.0	5.9	1.6	0.1**	100.0
Poultry and eggs	38.7	24.4	18.5	7.9	L	L	0.1	100.0
Broilers	26.2	41.0*	23.1	8.1	L	L	0.0	100.0
Miscellaneous livestock	23.0	5.8	11.7	15.7	14.7*	11.7*	17.3*	100.0
Crops	23.9	17.0	21.5	23.0	7.5	4.3	2.7	100.0
Food grains	12.2	15.2	28.3	31.2	7.8	4.0	1.2	100.0
Wheat	9.9	12.7	27.0	35.3	9.3	4.5	1.5	100.0
Feed crops	9.4	17.9	25.5	28.1	9.8	5.6	3.7	100.0
Corn	9.4	18.0	27.7	30.1	9.0	4.5	1.3	100.0
Cotton	33.5	22.4	22.4	17.0	2.9	1.1	0.7	100.0
Tobacco	8.8	12.0	23.9	21.7	9.5	10.5	13.7	100.0
Oil crops	9.1	15.5	28.2	30.4	8.1	6.7	1.9	100.0
Soybeans	8.9	15.5	27.8	30.3	8.4	7.1	2.0	100.0
Vegetables	32.7	29.6	20.0	15.7	0.6	0.3	1.1	100.0
Fruits and nuts	37.6	12.1	15.1	12.6	14.2	3.8	4.7*	100.0
All other crops	60.8	15.6	9.6	8.0	2.6*	1.8*	1.5*	100.0
Nursery	65.5	10.2	8.3	8.6	3.3*	2.3*	1.9*	100.0

^{*}Coefficient of variation is between 25 and 50. **Coefficient of variation is 55.3.

Source: Economic Research Service, U.S. Department of Agriculture.

L = Undisclosed.

Table 5-5—Number of farms, net value added, and net farm income by value of size class, 1995

Item		\$1,000,000 or more	\$500,000- \$999,999	\$250,000- \$499,999	\$100,000- \$249,999	\$50,000- \$99,999	\$20,000- \$49,999	Less than \$20,000	Total U.S.
					Νι	ımber			
	Number of farms ¹	17,395	30,286	75,338	219,341	194,723	261,012	1,273,425	2,071,520
					Thousa	and dollars			
	+ Final crop output	23,492,096	13,869,084	17,349,645	22,778,779	9,769,928	5,885,347	3,510,524	96,655,403
	+ Final animal output	33,084,270	9,869,206	11,291,234	17,941,382	7,456,227	4,205,628	3,769,294	87,617,240
	+ Services and forestry	2,368,752	1,675,331	2,028,145	3,258,052	1,937,084	1,773,561	6,333,787	19,374,713
	= Final agricultural sector output	58,945,118	25,413,621	30,669,023	43,978,213	19,163,239	11,864,536	13,613,605	203,647,356
less:	Intermediate consumption outlays	29,032,416	12,638,245	16,003,995	23,656,307	10,202,395	7,240,696	10,237,047	109,011,103
	Farm origin Manufactured inputs Other intermediate expenses	14,817,748 3,940,485 10,274,182	5,537,448 3,236,906 3,863,891	5,511,255 4,750,848 5,741,892	8,022,903 6,842,327 8,791,077	2,918,278 2,966,857 4,317,260	1,950,916 2,099,444 3,190,337	2,869,385 2,338,325 5,029,338	41,627,934 26,175,192 41,207,977
plus:	Net government transactions	-270,250	131,916	344,549	540,340	-118,852	-1,280	-551,956	74,466
	= Gross value added	29,642,452	12,907,292	15,009,577	20,862,245	8,841,992	4,622,560	2,824,602	94,710,719
less:	Capital consumption	1,398,914	1,341,075	2,012,534	3,651,769	2,256,226	2,276,740	5,977,015	18,914,273
	= Net value added	28,243,538	11,566,217	12,997,043	17,210,476	6,585,766	2,345,820	-3,152,413	75,796,446
less:	Factor payments	10,047,912	4,802,971	6,718,332	8,452,242	3,731,967	2,055,305	3,248,383	39,057,112
	Employee compensation	6,590,901	1,977,270	2,165,500	1,914,001	809,874	390,375	498,837	14,346,758
	Net rent received by nonoperator landlords Real estate and	1,408,958	1,638,331	2,888,860	3,647,447	1,380,675	646,057	373,661	11,983,988
	nonreal estate interest	2,048,054	1,187,370	1,663,972	2,890,794	1,541,417	1,018,873	2,375,885	12,726,365
	= Net farm income	18,195,626	6,763,246	6,278,710	8,758,235	2,853,799	290,515	-6,400,796	36,739,335

¹Farm Numbers and Land in Farms, National Agricultural Statistics Service, U.S. Department of Agriculture, Feb. 1998. Source: Economic Research Service, U.S. Department of Agriculture.

Table 5-6—Number of farms and net cash income by value of size class, 1995^{1, 2}

Item	\$1,000,000 or more	\$500,000- \$999,999	\$250,000- \$499,999	\$100,000- \$249,999	\$50,000- \$99,999	\$20,000- \$49,999	Less than \$20,000	Total U.S.
				Nu	mber			
Number of farms	17,395	30,286	75,338	219,341	194,723	261,012	1,273,425	2,071,520
				Millior	dollars			
Gross cash income	59,826	27,581	31,512	43,907	19,816	11,352	11,044	205,037
Cash receipts from marketings	57,693	25,977	29,049	40,058	17,922	9,756	7,248	187,704
Crops	25,154	15,675	17,837	22,341	10,444	5,692	3,557	100,700
Government supported	4,072	9,749	13,482	17,094	7,883	4,244	2,421	58,946
Nonsupported	21,082	5,926	4,355	5,246	2,561	1,448	1,136	41,755
Livestock	32,539	10,302	11,211	17,718	7,478	4,064	3,691	87,004
Government payments	282	688	1,372	2,116	838	805	1,153	7,253
Farm-related income	1,852	916	1,091	1,733	1,056	790	2,643	10,080
Cash expenses	39,222	17,912	23,695	33,549	14,740	9,951	14,790	153,860
Net cash income	20,604	9,669	7,817	10,358	5,076	1,401	-3,747	51,178
Percent	,	,	,	•	,	,	,	,
Percent of total:								
Number of farms	0.8	1.5	3.6	10.6	9.4	12.6	61.5	100.0
Gross cash income	29.2	13.5	15.4	21.4	9.7	5.5	5.4	100.0
Cash receipts from marketing	s 30.7	13.8	15.5	21.3	9.5	5.2	3.9	100.0
Crops	25.0	15.6	17.7	22.2	10.4	5.7	3.5	100.0
Government supported	6.9	16.5	22.9	29.0	13.4	7.2	4.1	100.0
Nonsupported	50.5	14.2	10.4	12.6	6.1	3.5	2.7	100.0
Livestock	37.4	11.8	12.9	20.4	8.6	4.7	4.2	100.0
Government payments	3.9	9.5	18.9	29.2	11.6	11.1	15.9	100.0
Farm-related income	18.4	9.1	10.8	17.2	10.5	7.8	26.2	100.0
Cash expenses	25.5	11.6	15.4	21.8	9.6	6.5	9.6	100.0
Net cash income	40.3	18.9	15.3	20.2	9.9	2.7	-7.3	100.0
Dollars								
Per farm operation:1								
Gross cash income	3,439,258	910,695	418,276	200,175	101,765	43,491	8,672	98,979
Cash receipts from marketings	3,316,612	857,743	385,579	182,630	92,038	37,379	5,692	90,612
Crops	1,446,043	517,573	236,765	101,853	53,635	21,808	2,793	48,612
Government supported	234,097	321,916	178,958	77,934	40,481	16,260	1,901	28,455
Nonsupported	1,211,946	195,657	57,806	23,919	13,154	5,548	892	20,156
Livestock	1,870,569	340,170	148,815	80,778	38,403	15,572	2,898	42,000
Government payments	16,196	22,709	18,213	9,646	4,305	3,085	905	3,501
Farm-related income	106,450	30,243	14,484	7,899	5,422	3,026	2,076	4,866
Cash expenses	2,254,764	591,447	314,518	152,952	75,698	38,125	11,615	74,274
Net cash income	1,184,493	319,248	103,758	47,223	26,068	5,366	-2,942	24,705

¹Farm operations may have several households sharing in the earnings of the business (for example, partners or shareholders in the farm corporation). The number of households per farm operation tends to increase as sales per farm increase.

²Based on final U.S numbers as of September 1997 and on distributors from the 1995 FCRS. Source: Economic Research Service, U.S. Department of Agriculture.

Table 5-7—Number of farms and net cash income by value of size class, 1996^{1, 2}

Item	\$1,000,000 or more	\$500,000- \$999,999	\$250,000- \$499,999	\$100,000- \$249,999	\$50,000- \$99,999	\$20,000- \$49,999	Less than \$20,000	Total U.S.
				Nui	mber			
Number of farms	21,904	42,843	98,090	214,739	159,743	229,738	1,296,853	2,063,910
				Million	dollars			
Gross cash income	63,505	33,870	43,563	42,155	16,393	10,883	10,221	220,590
Cash receipts from marketings	61,284	31,830	40,127	38,067	14,675	9,325	7,031	202,339
Crops	31,107	17,304	24,265	21,705	7,946	4,434	2,663	109,425
Government supported	8,835	11,522	18,277	17,590	5,774	3,490	1,599	67,085
Nonsupported	22,272	5,783	5,988	4,115	2,172	945	1,064	42,339
Livestock	30,176	14,525	15,862	16,363	6,730	4,891	4,367	92,914
Government payments	607	927	1,535	1,875	804	702	836	7,286
Farm-related income	1,614	1,113	1,902	2,212	914	856	2,354	10,966
Cash expenses	38,812	24,200	30,859	32,020	12,305	8,832	13,621	160,649
Net cash income	24,692	9,669	12,704	10,135	4,089	2,052	-3,400	59,941
	Percent							
Percent of total:								
Number of farms	1.1	2.1	4.8	10.4	7.7	11.1	62.8	100.0
Gross cash income	28.8	15.4	19.7	19.1	7.4	4.9	4.6	100.0
Cash receipts from marketings	30.3	15.7	19.8	18.8	7.3	4.6	3.5	100.0
Crops	28.4	15.8	22.2	19.8	7.3	4.1	2.4	100.0
Government supported	13.2	17.2	27.2	26.2	8.6	5.2	2.4	100.0
Nonsupported	52.6	13.7	14.1	9.7	5.1	2.2	2.5	100.0
Livestock	32.5	15.6	17.1	17.6	7.2	5.3	4.7	100.0
Government payments	8.3	12.7	21.1	25.7	11.0	9.6	11.5	100.0
Farm-related income	14.7	10.1	17.3	20.2	8.3	7.8	21.5	100.0
Cash expenses	24.2	15.1	19.2	19.9	7.7	5.5	8.5	100.0
Net cash income	41.2	16.1	21.2	16.9	6.8	3.4	-5.7	100.0
				Do	llars			
Per farm operation:1								
Gross cash income	2,899,244	790,552	444,114	196,307	102,624	47,373	7,881	106,880
Cash receipts from marketings	2,797,845	742,938	409,080	177,273	91,869	40,592	5,421	98,037
Crops	1,420,181	403,903	247,375	101,075	49,740	19,301	2,054	53,018
Government supported	403,353	268,929	186,327	81,912	36,144	15,190	1,233	32,504
Nonsupported	1,016,828	134,974	61,049	19,164	13,595	4,112	821	20,514
Livestock	1,377,664	339,035	161,704	76,198	42,129	21,291	3,368	45,019
Government payments	27,692	21,639	15,644	8,733	5,034	3,055	645	3,530
Farm-related income	73,708	25,975	19,390	10,301	5,721	3,726	1,815	5,313
Cash expenses	1,771,945	564,856	314,598	149,113	77,027	38,442	10,503	77,837
Net cash income	1,127,299	225,696	129,516	47,195	25,597	8,931	-2,622	29,042

¹Farm operations may have several households sharing in the earnings of the business (for example, partners or shareholders in the farm corporation). The number of households per farm operation tends to increase as sales per farm increase.

²Based on final U.S numbers as of September 1997 and on distributors from the 1995 FCRS.

Source: Economic Research Service, U.S. Department of Agriculture.